

## SYSTEM AND METHOD FOR PROVIDING POWER OVER A HOME PHONE LINE NETWORK

### ABSTRACT OF THE DISCLOSURE

A system and method is provided for supplying power over a home phone line network in a manner that is interoperable with other voice and data services operating on the same network. The system includes a power source coupled to the home phone line network. The power source includes an AC signal generator that generates an AC signal at a selected frequency. The power source also includes a band pass filter for removing unwanted harmonics from the AC signal, thereby generating a filtered AC signal for powering one or more devices on the home phone line network. One or more devices attached to the home phone line network, such as a telephone adapter or telephone, receives the filtered AC signal. Each device comprises a second band pass filter and an AC/DC converter. The second band pass filter passes the filtered AC signal to the AC/DC converter and prevents the introduction of undesired harmonics onto the home phone line network from the AC/DC converter. The AC/DC converter converts the filtered AC signal to a DC signal used for powering the device.